

REMARKS

Claims 3 and 19 have been canceled, so claims 1, 5-8, 17 and 21-23 are pending in the present application.

Claims 1, 6-7, 17 and 22 stand rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,537,117 to Rose ("the Rose reference"). For at least the reasons set forth below, the Rose reference does not teach each and every element of Claims 1, 6-7, 17 and 22.

Claim 1 recites that "the pulse repetition frequency is varied chaotically," and claim 17 recites a similar limitation. In support of the rejection, the Examiner asserts that the term "perturb," as it is used in the Rose reference, means "*to disturb greatly; to throw into great confusion.*" Additionally, the Examiner claims that "chaotically" as used in the present application means "*a condition of great distortion or confusion.*" However, Applicants respectfully submit that these interpretations asserted by the Examiner are not supported by the applied reference and the pending application.

The present specification describes the meaning of chaotically varying the pulse repetition frequency as follows:

In an example embodiment of the present invention, the pulse repetition frequency is **varied deterministically**. For example, it may be varied by using four different pulse repetition frequencies in a fixed order over fixed periods of time.

However, **it is also possible for the pulse repetition frequency to be varied chaotically**. This may be a safe method of variation, which may be advantageous with regard to potential intentional radar interference. (Specification, p. 2, ll. 29-37).

The pulse repetition frequency may be **varied deterministically**. Different pulse repetition frequencies may be used in a fixed order over a fixed period of time, for example.

In another example embodiment, however, **chaotic variation of the pulse repetition frequency may be provided**. (Specification, p. 4, ll. 14-19).

As can be seen from the above-quoted sections of the specification, “varied chaotically” means varied undeterministically. In contrast, the Rose reference describes ‘perturbing’ a pulse echo radar signal to create a false signal, which thereby “places the radar at a spurious geolocation **predetermined** by the radar (*emphasis added*). (Rose, col. 2, ll. 8-17). The perturbation or modulation of the radar signal is determined and carried out by a specific formula according to Doppler theory. (Rose, col. 2, ll. 35-49). “[T]he frequency changes in the radar required to prevent passive extraction of correct Doppler changes are small compared to the RF and PRF frequencies the radar employs.” (Rose, col. 2, ll. 27-30). The process described by the Rose reference of modifying a radar signal according to a specific Doppler formula to produce a false radar reading at a determined spurious location is simply not equivalent to varying the pulse repetition frequency chaotically, as recited in Claims 1 and 17. At no time does the Rose reference describe varying the radar signal in a chaotic manner. All perturbations of the RF and PRF frequencies are determined according to a precise formula and a desired false location.

Since the Rose reference does not teach or disclose varying the pulse repetition frequency chaotically, the Rose reference does not anticipate independent Claims 1 and 17, as well as dependent Claims 6, 7 and 22, under 35 U.S.C. §102(b). It is therefore respectfully requested that this rejection be withdrawn.

Claims 5 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Rose reference in view of United States Patent Number 5,109,231 to Olsson (“the Olsson reference”). Claims 5 and 21 depend from claims 1 and 17, respectively. As described above, the Rose reference does not teach varying the pulse repetition frequency chaotically. The Olsson reference does not overcome this deficiency. Since the combined teachings of the Rose reference and the Olsson reference do not disclose or suggest each and every feature of independent Claims 1 and 17, the combined teachings of the Rose and Olsson references do not render dependent Claims 5 and 21 obvious under 35 U.S.C. §103(a). It is therefore respectfully requested that this rejection be withdrawn.

Claims 8 and 23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over the Rose reference in view of United States Patent Number 3,979,752 to Charlot (“the Charlot reference”). Claims 8 and 23 depend from Claims 1 and 17, respectively. As described above, the Rose reference does not teach varying the pulse repetition frequency chaotically. The Charlot reference does not overcome this deficiency. Since the combined teachings of the Rose reference and the Charlot reference do not disclose or suggest each and every feature of independent Claims 1 and 17, the combined teachings of the Rose and

- Olsson references do not render dependent Claims 8 and 23 obvious under 35 U.S.C. §103(a).
- It is therefore respectfully requested that this rejection be withdrawn.


CONCLUSION

In light of the foregoing, Applicants respectfully submit that all of the pending claims are in condition for allowance. Prompt reconsideration and allowance of the present application are therefore earnestly solicited.

Respectfully Submitted,

Dated: 7/28, 2004

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